2.0 ALTERNATIVES ANALYSIS

The following sections describe the alternatives that were developed and considered for the Proposed Action. As presented earlier, the Proposed Action is a group of state-funded actions, namely:

- Transportation improvements at the Roberts Street/Silver Lane/EH Boulevard North intersection and the I-84 westbound off ramp at Roberts Street;
- Transportation improvements at the Route 2/Brewer/Main/High Streets/East Hartford Boulevard South area;
- Construction of an access road for the proposed EHGEMS; and,
- The development of permanent Stadium parking areas.

Other potential State funding could be directed to other on-site public infrastructure improvements, including the Mercer Avenue connection to UTC property. For each action, alternatives were conceived and developed through coordination with DOT, the Town of East Hartford, OPM, CREC, UTC, and TMG and its consultants.

Each design alternative was evaluated with respect to program needs and environmental and socioeconomic impact considerations, which are described below. CEPA also requires the consideration of the "no build" scenario. Under the no build scenario, there would be no infrastructure improvements in place to support the proposed site development, long-term Stadium parking needs, or access to the proposed magnet school. In the subsections below, the impact of the no build alternative for each of the above-listed state actions is discussed.

The primary access to Rentschler Field is at the Roberts Street/Silver Lane intersection, with secondary access from Brewer and Willow Streets. Some development could be accommodated without any of the state-funded transportation improvements in place. The Rentschler Field developer, TMG, is proposing minor improvements to the Roberts Street/Silver Lane intersection that will allow for approximately 900,000 sf of mixed use development. However, many of the intersections and roadways in the project area would not be capable of supporting site-generated traffic with additional development in place.

The effective loss of development potential at Rentschler Field would hinder the ability of the Town of East Hartford and the region to receive the economic benefits of development, as discussed in Section 3.3.5.

Since 2000, when conceptual development plans for Rentschler Field were initiated, efforts were made to study existing and projected traffic volumes and patterns in order to develop an acceptable transportation design of the major intersections and roadway segments in the northern and southern ends of the project area. As part of this CEPA process, a series of stakeholder meetings were convened to further develop and assess various design alternatives. Stakeholders involved in the development of alternatives described below include: DECD, DOT, OPM, TMG (and its consultants), and UTC. The following is a description of the alternatives developed and considered in this EIE with summaries of the positive and negative attributes of each alternative relative to the following:

- *Operational Factors* - safety, traffic flow to/from various roadways, merge/weave movements, signage, separation of background and Stadium traffic;

- *Natural Resource Impacts* - impacts to wetlands, watercourses, floodplains/floodways, wildlife, state/federal listed species, air quality, noise, contaminated soils;
- *Socioeconomic Impacts* - impacts to historic and archaeological resources, impacts to residential and business properties, low income and minority populations; and
- *Constructability* - ability of construction to occur with minimal disruption to existing traffic, cost.

Following the description of each alternative is a comparison of the alternatives relative to the above listed factors.

2.1 ROBERTS STREET/SILVER LANE/EAST HARTFORD BOULEVARD NORTH INTERSECTION

The following is a summary of the no-build and two build alternatives for this intersection. The build alternatives were developed over a 2-year period in an iterative process. All the build alternatives that were considered during this period consisted of a grade-separated intersection with Roberts Street elevated over Silver Lane with various ramp and touchdown configurations. The only exception was a concept in which Silver Lane would be elevated over Roberts Street, but this was dismissed due to the significant property and access impacts to residents along the north side of Silver Lane.

The two build alternatives presented herein are the results of many iterative concepts. These alternatives were given the highest level of consideration because they satisfy the operational criteria stated above, while attempting to avoid sensitive environmental and cultural resources and property impacts.

2.1.1 No Build

Under the No Build Alternative, the proposed Roberts Street/Silver Lane grade separation and all transportation improvements to support Rentschler Field development would not be constructed. This would limit the development potential of the Rentschler Field site to approximately 900,000. Table 2.1.1-1 depicts the levels of service (LOS) that would be experienced with full site development and no proposed roadway improvements (beyond the developer's proposed Phase 1 improvements). As shown, approximately one-third of the intersections in the project area would operate at unacceptable levels of service (E or worse). Most notably, the critical intersections of Roberts Street/Silver Lane, High Street/West Brewer Street/ Route 2 WB On Ramp and Main Street/Willow Street would all experience failures in the AM and PM peak hours (PM failure only for High Street/West Brewer Street/ Route 2 WB On Ramp). From this analysis it is clear that substantial improvements to many of the intersections and mainline segments of perimeter roads to Rentschler Field are needed to support the proposed future full build development.

Table 2.1.1-1. Intersection Levels of Service for 2020 Full Site Development Without Roadway Improvements

Intersection	AM LOS		PM LOS	
	Signalized Intersections	Unsignalized [1] Intersections	Signalized Intersections	Unsignalized [1] Intersections
Robert Street @ Simmons Road	C		C	
Roberts Street @ I-84 WB Off Ramp/Brookside La.	F		F	
Roberts Street @ I-84 WB On Ramp (Eastern Junction)		B		E
Roberts Street @ I-84 WB On Ramp (Western Junction)		A		B
Robert Street @ I-84 EB Ramps	C		D	
Silver Lane @ Forbes Street	C		D	
Silver Lane @ Simmons Road	A		B	
Silver Lane @ Robert Street/Airport Road	F		F	
Silver Lane @ Mercer Avenue/I-84 HOV	E		D	
Silver Lane @ Rt 15 NB Off-Ramp		B		B
Maple Street @ Route 2 WB On-Ramp		A		B
Maple Street @ Route 2 EB Ramps			A	
Cambridge Drive @ Route 2 WB On Ramp		A		A
Sutton Street @ Route 2 EB Off Ramp		A		A
Sutton Street @ Main Street		A		B
Brewer Street @ Forbes Street	B		C	
Brewer Street @ Glenn Road/P&W	E		A	
High Street @ West Brewer St. / Route 2 WB	B		F	
High Street @ Route 2 E.B. Ramps		A		A
High Street @ High Court		A		A
High Street @ Carter Street		A		A
Main Street @ Carter Street		E		B
Main Street @ Rt 2 WB Off Ramp	E		C	
Main Street @ Brewer Street	D		F	
Main Street @ Ensign Street/P&W	A		B	
Main Street @ Crosb333y Street/P&W	A		B	
Main Street @ Willow Street/Willow Street Ext.	F		F	
Main Street @ Willys/Brown Streets	A		A	
Main Street @ Route 5/15 NB Ramps/Csp Union Drive	B		B	
Main Street @ Silver Lane	C		C	
Willow Street @ Airport Road/P&W	F		F	
Willow Street @ P&W Drive		G		
Willow Street Ext. @ Rt 2 WB On Ramp/Hillson Street		C		F
Willow Street Ext. @ Rt 2 EB Off Ramp/Riverside Drive		E		C
Rt 15 SB On-Ramp @ Silver Lane		D		C
East River Drive @ Rt 15 SB Ramps	A		A	
East River Drive @ Rt 2 WB Off-Ramp	A		A	
East River Drive @ Jayce Street/ Route 2 E.B.	B		B	
High Street @ P&W Drive		A		A

[1] Synchro Unsignalized Intersection ICU LOS

2.1.2 Alternative 1 – Split Roberts Street Grade-Separation Ramps

This alternative (the preferred alternative) would involve elevating Roberts Street over Silver Lane in a split configuration to access Rentschler Field. This plan is a derivative of a plan that was originally conceived in 2000 as part of the original site development plan.

The preferred alternative is the construction of a grade-separated Roberts Street/Silver Lane intersection as shown in Figures 1.2.1-2 through 1.2.1-4. The profile of the Roberts Street and East Hartford Boulevard North is shown in Figure 1.2.1-6. The proposed improvements to this intersection include grade separating the existing intersection of Roberts Street and Silver Lane and relocating the intersection to the west approximately 30 feet. Roberts Street would connect to East Hartford Boulevard North south of Silver Lane making Roberts Street the primary access to the proposed Rentschler Field development. This relocation of the Roberts Street / Silver Lane intersection and other improvements would also benefit the Rentschler Field Stadium by providing direct access from I-84 / Roberts Street and points north into the Stadium without affecting Silver Lane traffic. Access directly to the Rentschler site from Silver Lane would be provided via two one-way roadways that would connect to Silver Lane at the location of the existing Silver Lane / Roberts Street intersection, underneath the proposed Roberts Street overpass. This new geometry is also designed to allow for improved access to the Stadium, thereby minimizing the need for temporary traffic control measures before and after events. These improvements will require minor ROW acquisition from some of the properties along Silver Lane. The bulk of the new roadway network is located on UTC Property.

The following is a summary of the positive and negative aspects of Alternative 1.

2.1.2.1 Positive Attributes

- This alternative achieves a high degree of constructability by maintaining a portion of the existing Roberts Street/Silver Lane intersection in operation as the split elevated ramps are constructed;
- Traffic flow on the mainline and at the intersections achieves acceptable levels of service for all segments/intersections affected;
- Flexibility for directing Stadium traffic is built into this design with temporary controls;
- Access to and from all existing streets is provided;
- Site generated traffic is provided a free-flow condition for accessing Roberts Street and I-84;
- Impacts to private property (non-UTC) are minor; and
- Simmons Road is not significantly impacted.

2.1.2.2 Negative Attributes

- Additional merging and weaving movements are created but would be mitigated by effective signage;
- Crossing of Willow Brook and its associated wetlands and floodzones is unavoidable;
- Impacts to UTC frontage property are substantial;
- Possible sliver acquisitions of properties of two historic structures on Roberts Street may occur;
- Stadium traffic cannot be accommodated without temporary controls (cones, traffic officers, etc.); and
- Unavoidable impacts to marginal grassland bird habitat immediately west of the Stadium.

2.1.3 Alternative 2 – Roberts Street Grade Separation with Relocated Silver Lane

Alternative 2 would involve a grade-separated intersection at Roberts Street and Silver Lane. This alternative is similar to Alternative 1, with two distinct differences: 1) A segment of Silver Lane east of the intersection would be relocated to the south (Figure 2.1.3-1); and, 2) the grade separation would be further to the west. The relocation of the Silver Lane segment would encroach upon additional UTC property, but would avoid potential property impacts to homes on the north side of Silver Lane. These homes would no longer have direct access to Silver Lane, rather the remnant Silver Lane would become a driveway access for approximately six homes.

The relocation of Silver Lane would create the need for a signalized intersection because of the convergence of: motorists traveling eastbound on Silver Lane attempting to access Roberts Street northbound; southbound Roberts Street traffic heading to Silver Lane; and Stadium traffic from Roberts Street. This large scale intersection would involve additional impact to flood zones and wetlands associated with Willow Brook.

The location of the grade separation (southbound barrel) would not directly impact the existing historic house in the northwest quadrant of the intersection (Samuel Forbes house), however it would be closer to it than Alternative 1.

The following are the positive and negative attributes of Alternative 2.

2.1.3.1 Positive Attributes

- This alternative achieves a high degree of constructability by maintaining a portion of the existing Roberts Street/Silver Lane intersection in operation as the split elevated ramps are constructed;
- Flexibility for directing Stadium traffic is built into this design with temporary controls;
- Access to and from all existing streets is provided;
- Site generated traffic is a provided a free-flow condition for accessing Roberts Street and I-84;
- Impacts to private property (non-UTC) are minor;
- Traffic in front of approximately six homes on the north side of Silver Lane would be eliminated; and
- Simmons Road is not significantly impacted.

2.1.3.2 Negative Attributes

- Additional merging and weaving movements are created but will be mitigated by effective signage;
- Crossing of Willow Brook would involve additional wetlands and floodzones impacts;
- Silver Lane eastbound and westbound traffic would not have free flow - an additional signalized intersection would be instituted;
- The southbound Roberts Street grade separation barrel would be closer to the Samuel Forbes house (a historic structure) resulting in potentially greater noise and air impacts;
- Possible sliver acquisitions of properties of two historic structures on Roberts Street may occur;
- Direct access to Silver Lane for approximately six houses would be eliminated;

- Stadium traffic cannot be accommodated without temporary controls (cones, traffic officers, etc.);
- All on-site reserved Stadium parkers would be forced to enter at the East Gate, which, along with Silver Lane, lacks sufficient capacity; and
- Unavoidable impacts to marginal grassland bird habitat immediately west of the Stadium.

2.1.4 Comparison of Alternatives

Alternatives 1 and 2 are similar in many ways. They both provide free flow access from the Rentschler Field site to Roberts Street and the I-84 ramps. Both involve split elevated structures over Silver Lane. The major differences are twofold: 1) A segment of Silver Lane east of the intersection would be relocated to the south (Figure 2.1.3-1); and, 2) the grade separation over Roberts Street over Silver Lane would be further to the west.

With a relocated Silver Lane (Alternative 2), an additional large-scale intersection is introduced to the roadway network because of the convergence of traffic. This would result in additional delay in the roadway network system as Silver Lane traffic would no longer have free flow movement in this area. Under Alternative 1, Silver Lane traffic operates in a free flow condition east of the existing Roberts Street/Silver Lane intersection.

Property impacts associated with Alternative 2 are less than that of Alternative 1 because residences on the north side of Silver Lane, east of the Roberts Street/Silver Lane intersection would not be directly affected. However, greater indirect impacts to the Samuel Forbes house at the northwest corner of the intersection would occur under Alternative 2.

Alternative 2 was presented to the Town of East Hartford staff and they determined that this configuration would be an inconvenience to travelers along Silver Lane. Also, they opined that the potential for driver confusion was high for this alternative, give the additional large-scale intersection.

In summary, Alternative 1 is preferred over Alternative 2 because of its relative simplicity in design and better traffic conveyance, particularly along Silver Lane. Also, wetland and flood zone impacts would be less with Alternative 1.

Alternative configurations for the I-84 westbound off ramp at Roberts Street were also considered, however, options to the proposed improvements are limited given the close proximity of the I-84 westbound on-ramp, Brookside Lane and existing businesses to the immediate east of the intersection. In order to minimize impacts to the existing wetland immediately east of Brookside Lane, Brookside Lane would have to be eliminated or relocated to connect to the Margarita's Restaurant parking lot. Elimination of Brookside Lane is not feasible as there is an existing business to the rear whose sole access is from this street. Relocation of the street to the Margarita's Restaurant would severely impact the parking area of this business. Relocation of the street further west, towards the I-84 eastbound is also not feasible due to the proximity of the ramp.

LEGEND

- UTC PROPERTY BOUNDARY
- OTHER PROPERTY BOUNDARY (MDC)
- WETLANDS – FEDERAL (1998)
- WETLANDS – STATE ONLY (TOWN APPROVED, 1998)
- WETLANDS – ESTIMATED BY BEC, 2005
- 100–YEAR FLOODPLAIN (CTGIS), (F & O, 2001, 2006)
- FLOODWAY BOUNDARY (CTGIS), (F & O, 2001, 2006)
- EXISTING WATER RESOURCES SOURCE: CT GIS
- HIGH CONTAMINATION RISK PROPERTY OUTLINE (M&E, 2006)
- MODERATE CONTAMINATION RISK PROPERTY OUTLINE (M&E, 2006)
- HISTORICAL PROPERTY

SCALE

200 0 200

PROPERTY LINE INFORMATION BASED ON MDC MAPPING

INFRASTRUCTURE IMPROVEMENT/ RENTSCHLER FIELD DEVELOPMENT ENVIRONMENTAL IMPACT EVALUATION EAST HARTFORD, CT

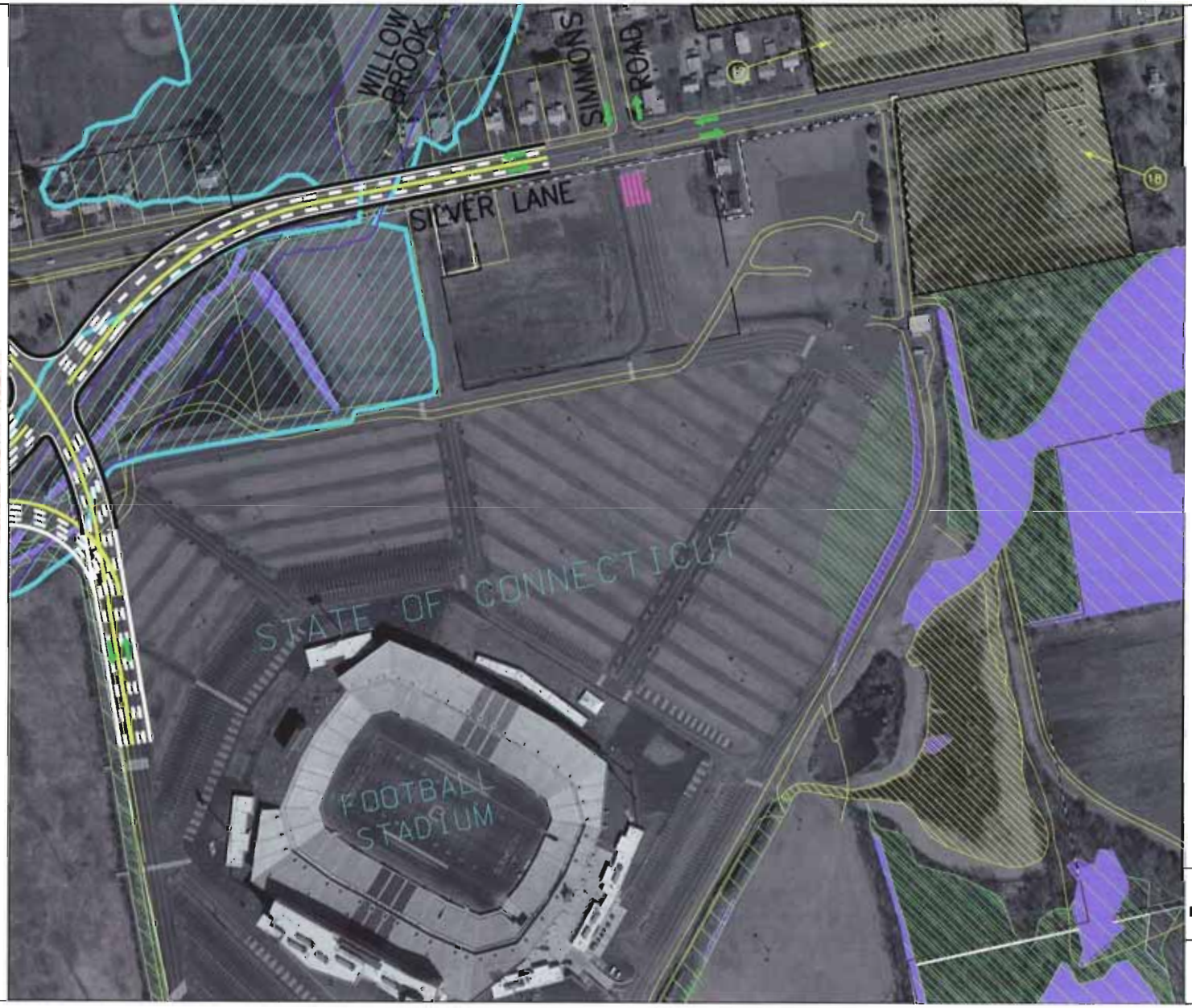
SCALE 1" = 200'

DATE AUGUST 2006

FIGURE 2.1.3-1 (1 OF 3) ROADWAY IMPROVEMENTS AT ROBERTS ST./SILVER LN./E.H. BLVD.

MATCH MARK FIGURE 2.1.3-2

MATCH MARK FIGURE 1.2.1-xxxx



MATCH MARK FIGURE 2.1.3-1

LEGEND

- UTC PROPERTY BOUNDARY
- OTHER PROPERTY BOUNDARY (MDC)
- WETLANDS – FEDERAL (1998)
- WETLANDS – STATE ONLY (TOWN APPROVED, 1998)
- WETLANDS – ESTIMATED BY BEC, 2005
- 100–YEAR FLOODPLAIN (CTGIS), (F&O, 2001, 2006 – SOUTH OF SILVER LN.) (FEMA,1979– N. OF SILVER LN.)
- FLOODWAY BOUNDARY (CTGIS), (F&O, 2001, 2006 – SOUTH OF SILVER LN.) (FEMA,1979– N. OF SILVER LN.)
- EXISTING WATER RESOURCES SOURCE: CT GIS
- HIGH CONTAMINATION RISK PROPERTY OUTLINE (M&E, 2006)
- MODERATE CONTAMINATION RISK PROPERTY OUTLINE (M&E, 2006)
- HISTORICAL PROPERTY

SCALE

200 0 200

PROPERTY LINE INFORMATION BASED ON MDC MAPPING

INFRASTRUCTURE IMPROVEMENT/ RENTSCHLER FIELD DEVELOPMENT ENVIRONMENTAL IMPACT EVALUATION EAST HARTFORD, CT

SCALE 1" = 200'

DATE AUGUST 2006

FIGURE 2.1.3-2 (2 OF 3) ROADWAY IMPROVEMENTS AT SILVER LANE AND SIMMONS ROAD

MATCH MARK FIGURE 2.1.3-3

LEGEND

- UTC PROPERTY BOUNDARY
- OTHER PROPERTY BOUNDARY (MDC)
- WETLANDS – FEDERAL (1998)
- WETLANDS – STATE ONLY (TOWN APPROVED, 1998)
- WETLANDS – ESTIMATED BY BEC, 2005 (F & O, 2001, 2006)
- 100–YEAR FLOODPLAIN (CTGIS), (F & O, 2001, 2006)
- FLOODWAY BOUNDARY (CTGIS),
- EXISTING WATER RESOURCES SOURCE: CT GIS
- HIGH CONTAMINATION RISK PROPERTY OUTLINE (M&E, 2006)
- MODERATE CONTAMINATION RISK PROPERTY OUTLINE (M&E, 2006)
- HISTORICAL PROPERTY

SCALE

200 0 200

PROPERTY LINE INFORMATION BASED ON MDC MAPPING

INFRASTRUCTURE IMPROVEMENT/ RENTSCHLER FIELD DEVELOPMENT ENVIRONMENTAL IMPACT EVALUATION EAST HARTFORD, CT

SCALE 1" = 200'

DATE AUGUST 2006

FIGURE 2.1.3-3 (3 OF 3)
ROADWAY IMPROVEMENTS AT E. HARTFORD BLVD AND LOOP ROADS

2.2 ROUTE 2/BREWER/MAIN/HIGH STREETS AREA

Improvements to the roadway system in the southern portion of the project area are required to accommodate traffic generated from the proposed development beyond Phase 1. Approximately 1,100 additional vehicular trips are anticipated to exit the southern portion of the project area in the PM peak hour. This is approximately 20% of all site generated traffic. Design alternatives to accommodate this additional traffic were developed similar to that of the northern connection in that there was an iterative process with DOT, the Town of East Hartford, OPM, UTC and TMG. The following is a description of the design alternatives that were considered the best alternatives through this process.

2.2.1 No Build

For the No Build alternative, there would be no changes to the existing roadway system in the Route 2/Brewer/Main/High Streets area. Traffic analyses have demonstrated the need for a southern connection to Rentschler Field in order to support large-scale development. Even with significant improvements to the Roberts Street/Silver Lane intersection, another connection to a major limited access highway, namely Route 2, is needed to distribute traffic to the local and regional highway network.

Furthermore, there is the potential for traffic congestion at the Roberts Street/Silver Lane intersection during Stadium events, even with the northern connection improvements. Relief is needed at the southern end of the project area so that site development and Stadium operations can co-exist. Much of the proposed future stadium parking (Areas 5 and 6) is best accessed from the south via Route 2, Main Street and the proposed East Hartford Boulevard South (Figure 1.2.2-1).

2.2.2 Alternative 1 – Route 2/Brewer/Main/High Streets Area

To accommodate additional development beyond Phase 1, transportation improvements would also be required in the Route 2/Brewer/Main/High Streets area in order to provide a southern connection to and from the proposed Rentschler Field development. East Hartford Boulevard South is a new roadway proposed between the southern portion of the Rentschler development and Main Street / High Street (Figure 1.2.1-8). East Hartford Boulevard South would cross the existing Pratt & Whitney (P&W) engineering parking field and intersect Main Street to the north of Augie and Ray's opposite the Shell Gas station. High Street will be realigned to intersect Main Street opposite East Hartford Boulevard South, approximately 575 feet south of the existing Main Street /High Street intersection. High Street would remain a one-way southbound. Main Street between the existing High Street intersection and the new intersection of High Street / East Hartford Boulevard South will be converted to two-way traffic. This new roadway network would require the acquisition of part or the entire property of the Shell Gas Station on the west side of Main Street and the Nail Salon located on the east side of Main Street.

The positive and negative aspects of Alternative 1 are presented below.

2.2.2.1 Positive Attributes

- This alternative is relatively easy to construct while maintaining existing traffic on Main and High Streets;
- Traffic flow on the mainline and at the intersections will achieve acceptable levels of service for all segments/intersections affected;

- Access to existing businesses on Main Street is unaffected;
- Existing one-way traffic movement on Main and High Streets remains;
- Flexibility for directing Stadium traffic is built into this design with temporary controls;
- Access to and from all existing streets is provided;
- No improvements to the existing Route 2 ramps are required;
- No impacts to natural resources are expected; and,
- No impacts to cultural resources are expected.

2.2.2.2 Negative Attributes

- Two (2) full property acquisitions are needed - one an existing business and one a vacant commercial lot;
- Partial acquisition of approximately ten (10) other commercial/residential properties may occur, but functionality of these homes/business would not be significantly affected.

2.2.3 Alternative 2 – Route 2/Brewer/Main/High Streets Area

This alternative was developed with the primary goal of providing the most direct access to the Rentschler Field property. This would be accomplished by relocating the Route 2 westbound off ramp at Main Street (Exit 5A) to the east. The touchdown point for the ramp would be Brewer Street, approximately 300 feet east of the Main/Brewer Street intersection. A new 4-legged intersection would be created at this point. Brewer Street would be widened from Main Street to Hamilton Road to accommodate the additional traffic demand.

Under Alternative 2, the existing one-way (northbound) Main Street would be converted to a 2-way street. High Street, from its confluence with Main Street to Carter Street would be converted from a one-way (southbound) street to a two-way street.

A new diagonal connector road would be constructed from the Main Street/Carter Street intersection to the High Street/Existing Route 2 eastbound on ramp intersection to facilitate north-south traffic movements.

The existing Route 2 eastbound on ramp at High Street would be abandoned and replaced with a new ramp on Main Street immediately north of Carter Street.

The Route 2 eastbound off ramp at High Street would be relocated to the southwest to the existing P&W access road.

The positive and negative attributes of this alternative are presented below.

2.2.3.1 Positive Attributes

- Direct access to Rentschler Field is provided from Route 2 westbound;
- The existing substandard Route 2 eastbound on-ramp at High Street would be removed in favor of a new on ramp at Main Street;
- Two-way directional flow is provided for Main Street and High Street which could benefit local businesses;
- No impacts to natural resources are expected; and,
- No impacts to cultural resources are expected.

2.2.3.2 Negative Attributes

- At least six (6) full property acquisitions would be needed, all residential;
- Partial acquisition of at least nine (9) properties would be required, 5 of which are commercial properties that could be functionally impacted;
- One of the partial acquisitions is the rear lawn area of a low income housing project on Hamilton Street;
- Partial acquisition of UTC property that is currently vacant;
- Impacts to traffic flow would be relatively high given the number of ramps to be affected; and,
- Construction cost and time to construct would be relatively high.

2.2.4 Comparison of Alternatives

The major difference between the two alternatives is that Alternative 1 maintains the existing Route 2 ramp configurations, while Alternative 2 relocates the Route 2 westbound off ramp to the east. This provides a more direct connection to Rentschler Field for vehicles traveling westbound on Route 2.

Also, Alternative 2 provides two-way traffic flow along portions of Main Street and High Street, whereas Alternative 1 maintains the existing flow directions.

Major ramp realignment is proposed for three Route 2 ramps under Alternative 2. This would optimize traffic flow entering and exiting Route 2, but would be more costly and would take several years to construct.

Property impacts would occur for both alternatives. For Alternative 1, there would be two full property acquisitions required and the demolition or relocation of a commercial building (nail salon). There would also be approximately ten (10) partial property acquisitions of residential and commercial properties although none would significantly affect the functionality of the properties.

For Alternative 2, the property impacts would be significant. At least six (6) full property acquisitions would be required. Also, at least nine (9) partial property acquisitions would be required, 5 of which could affect the functionality of commercial properties. One of the partial acquisitions would be the rear yard of a low income housing project on Hamilton Street.

In summary, Alternative 1 is preferred because of less full property acquisitions, simplicity of design, and ease of construction.

LEGEND

- UTC PROPERTY BOUNDARY
- OTHER PROPERTY BOUNDARY (MDC)
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- WETLANDS – ESTIMATED BY BEC, 2005
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- FLOODWAY BOUNDARY (CTGIS), (FEMA, 1979)
- EXISTING WATER RESOURCES SOURCE: CT GIS
- HIGH CONTAMINATION RISK PROPERTY OUTLINE (M&E, 2006)
- MODERATE CONTAMINATION RISK PROPERTY OUTLINE (M&E, 2006)
- HISTORICAL PROPERTY

SCALE

200 0 200

PROPERTY LINE INFORMATION BASED ON MDC MAPPING

INFRASTRUCTURE IMPROVEMENT/ RENTSCHLER FIELD DEVELOPMENT ENVIRONMENTAL IMPACT EVALUATION EAST HARTFORD, CT

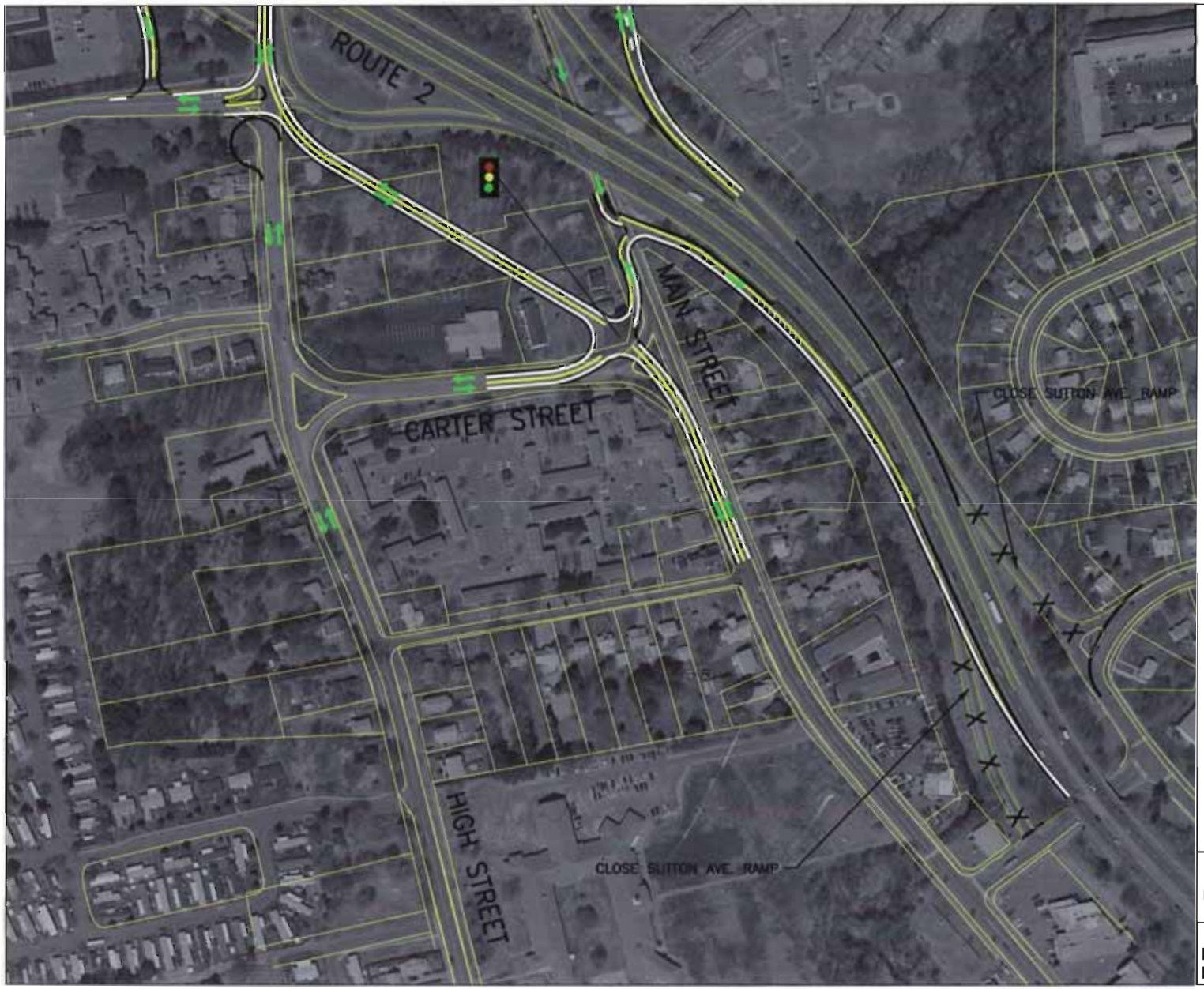
SCALE 1" = 200'

DATE AUGUST 2006

FIGURE 2.2.3-1 (1 OF 2)
ROADWAY IMPROVEMENTS AT HIGH ST, MAIN ST, BREWER ST, AND E.H. BLVD. S.

MATCH MARK FIGURE 2.2.3-2

MATCH MARK FIGURE 2.2.3-1



LEGEND

- UTC PROPERTY BOUNDARY
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- WETLANDS – FEDERAL (1998)
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- WETLANDS – ESTIMATED BY BEC, 2005
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- FLOODWAY BOUNDARY (CTGIS), (FEMA, 1979)
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SCALE

200 0 200

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INFRASTRUCTURE IMPROVEMENT/ RENTSCHLER FIELD DEVELOPMENT ENVIRONMENTAL IMPACT EVALUATION EAST HARTFORD, CT

SCALE 1" = 200'

DATE AUGUST 2006

FIGURE 2.2.3-2 (2 OF 2)
ROADWAY IMPROVEMENTS AT HIGH ST, MAIN ST, BREWER ST, AND E.H. BLVD. S.

2.3 EHGEMS ACCESS ROAD

Several potential access routes to and from the proposed EHGEMS have been identified and evaluated. A preferred access point is largely dependent on the ultimate location of the school site which was contingent on several factors including: the availability of UTC land, presence of wetlands and floodplain resources, and anticipated vehicle and bus routes.

UTC has offered a parcel of land within Rentschler Field to CREC for the construction of the EHGEMS. The site is an upland forest located immediately west of the CIBA and EHHS in the east-central portion of Rentschler Field (Figure 2.3-1).

Three general access points have been considered, from the north off Silver Lane, from the south off Brewer Street and from the east off Forbes Street. The access roadway layouts for the Brewer Street and Silver Lane alternatives were designed in accordance with the *Town of East Hartford Manual of Technical Design*, using the design standards for a "collector street" because these access roads could potentially serve other developments. A typical collector street has a right-of-way (ROW) width of 60 feet, a design speed of 45 miles per hour, and a minimum centerline radius curve of 500 feet. It is anticipated that all the requisite utilities would be contained within the ROW.

The alternative for the Forbes Street access was designed as a driveway because it would only serve the school and would be of minimal length (1,000 feet approximately). The ROW width for the access from Forbes was assumed at 40 feet, sufficient for 30 feet of pavement with snow shelves and a sidewalk.

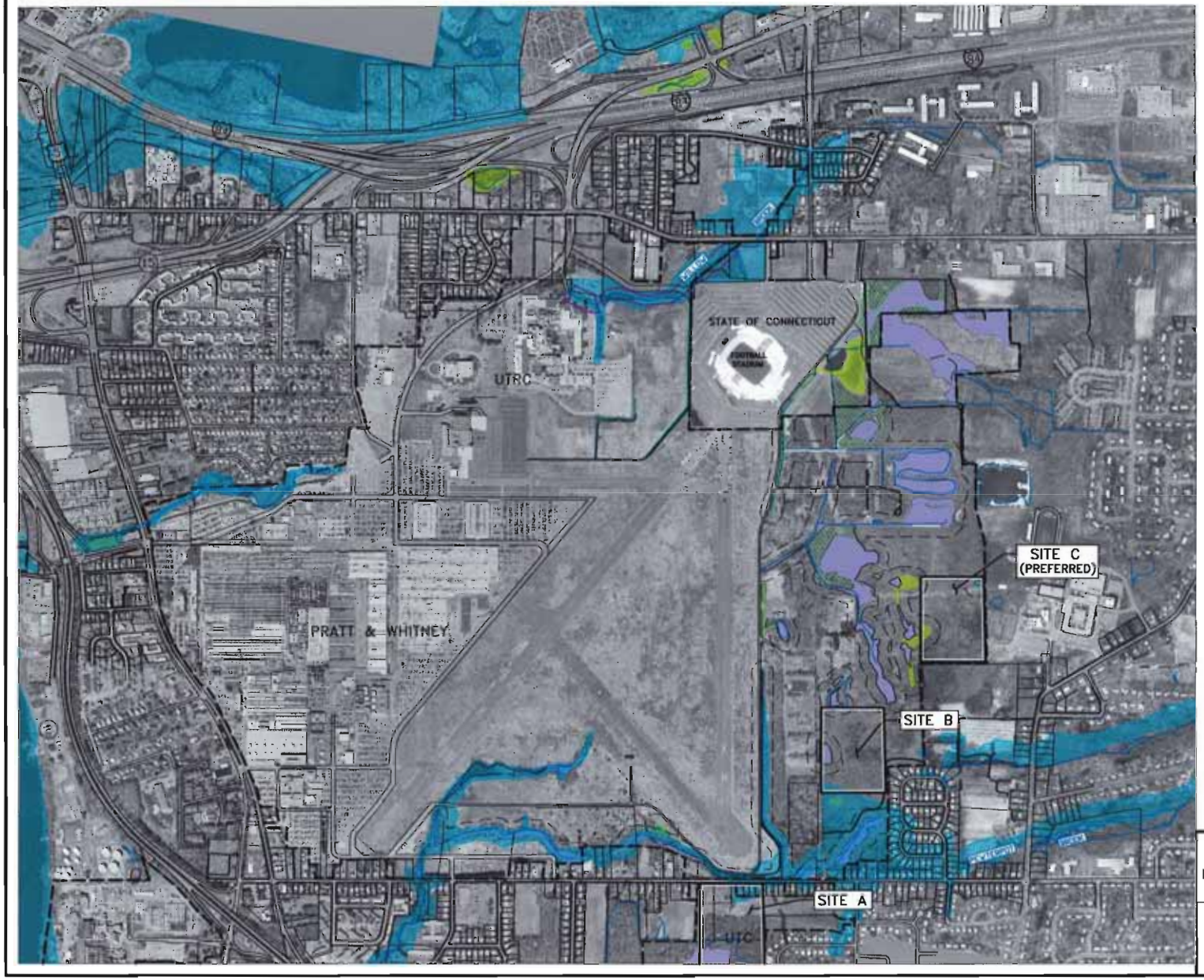
2.3.1 No Build

If an access drive to the proposed EHGEMS is not constructed, then the magnet school could not be constructed. This non-action is contrary to the goals of the State which is to comply with the goals set forth by the *Sheff vs. O'Neill* by constructing interdistrict magnet schools.

2.3.2 Alternative 1 – Access from Silver Lane

Access to the proposed EHGEMS from Silver Lane would require the use of the loop road (Figure 2.3.2-1) that is part of TMG's proposed internal roadway system. As currently configured, the loop road would provide access to the open portions of Rentschler Field with an east-west spur to access planned development in the eastern portion of the UTC property, including the EHGEMS and a future development immediately north of the EHGEMS. Alternative 1 includes the extension of this loop road spur to the proposed magnet school site driveway and parking lot. The extension would require two wetland crossings. To minimize wetland impacts, this alternative was designed with a minimum centerline radius curve of 200 feet, a variance to the alignment criteria for a collector street.

The entire loop road, including the spur to the eastern portion of the UTC property, is not planned for completion until the later phases of development of the entire Rentschler Field site. Therefore, initially, only a portion of the loop road extending from Silver Lane to the proposed EHGEMS would be available to service the magnet school, operating under a two-way traffic pattern. This would create a significant timing issue relative to the implementation of the magnet school.



LEGEND

- UTC PROPERTY BOUNDARY
- OTHER PROPERTY BOUNDARY (MDC)
- WETLANDS – STATE & FEDERAL (1998)
- WETLANDS – STATE ONLY (TOWN APPROVED, 1998)
- WETLANDS – ESTIMATED BY BEC, 2005
- 100–YEAR FLOODPLAIN (CTGIS), (F & O, 2006)
- FLOODWAY BOUNDARY (CTGIS), (F & O, 2006)
- EAST HARTFORD IWWC REGULATED AREA
- EXISTING WATER RESOURCES SOURCE: CT GIS
- 15 ACRE DEVELOPMENT BLOCK

NOTE: PROPOSED ROADWAY ALIGNMENT SUBJECT TO CHANGE.

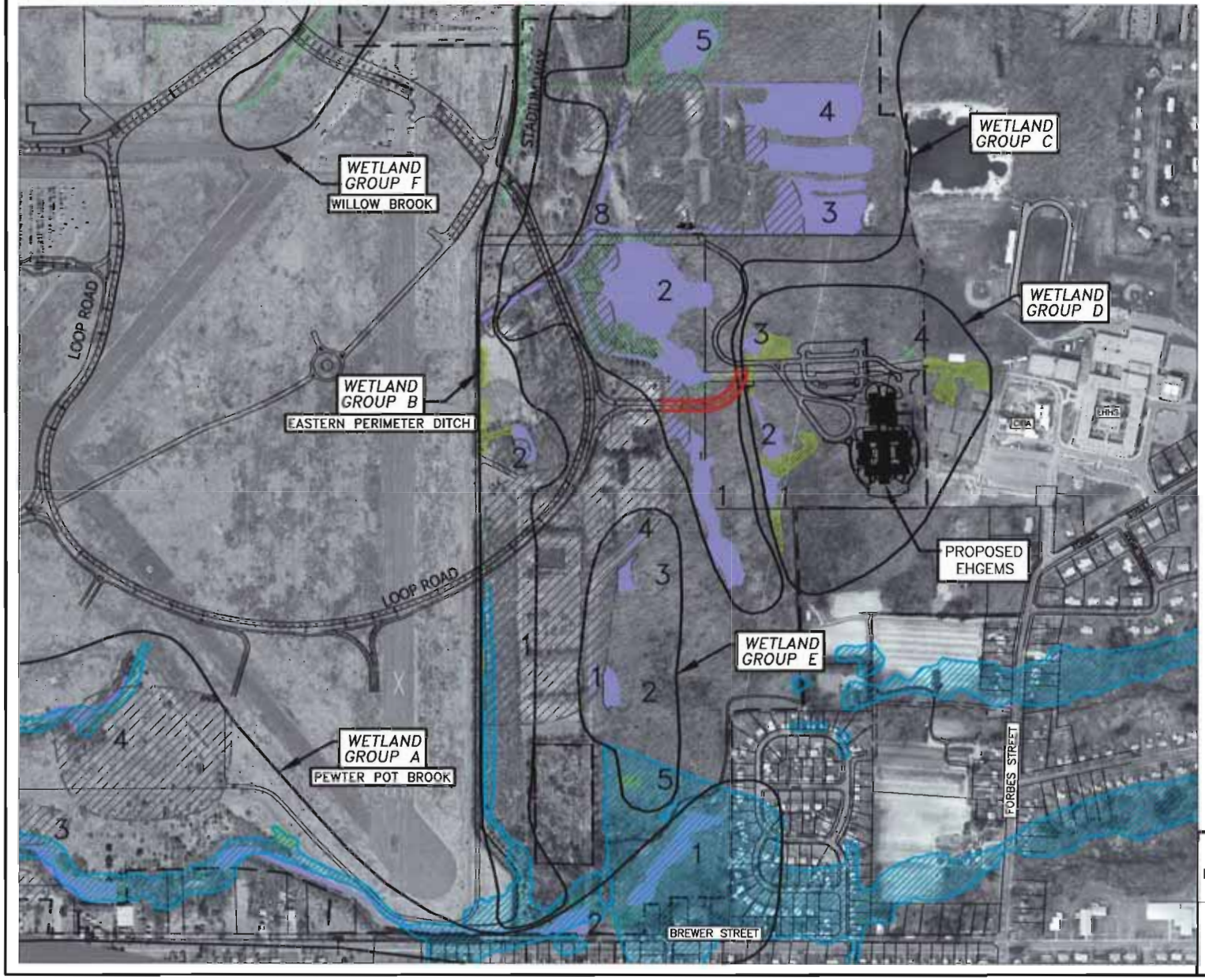
AERIAL PHOTO (SBC, 2002 AND COL–EAST, 2005)

INFRASTRUCTURE IMPROVEMENT/ RENTSCHLER FIELD DEVELOPMENT ENVIRONMENTAL IMPACT EVALUATION EAST HARTFORD, CT

SCALE 1" = 1000'

DATE AUGUST 2006

FIGURE 2.3-1
POTENTIAL MAGNET SCHOOL SITES



LEGEND

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- WETLANDS – STATE ONLY (TOWN APPROVED, 1998)
- WETLANDS – ESTIMATED BY BEC, 2005
- 100–YEAR FLOODPLAIN (CTGIS)
- FLOODWAY BOUNDARY (CTGIS)
- CONTAMINATED AREAS AND/OR PROPOSED ELUR (SOURCE: UTC)
- 3 WETLAND ID NUMBER
- PROPOSED MAGNET SCHOOL ROAD

AERIAL PHOTO (SBC, 2002 AND COL–EAST, 2005)

INFRASTRUCTURE IMPROVEMENT/ RENTSCHLER FIELD DEVELOPMENT ENVIRONMENTAL IMPACT EVALUATION EAST HARTFORD, CT

SCALE 1" = 500'

DATE JULY 2006

FIGURE 2.3.2-1
MAGNET SCHOOL ACCESS ROAD ALTERNATIVE 1

Alternative 1 would result in wetland impacts, but no stream crossings or floodplain impacts. The roadway would cross a utility easement containing a CL&P electrical transmission line, potentially requiring the relocation of utility poles.

Impacts to a forested red maple swamp are unavoidable, but have been minimized by crossing at its narrowest point. The second wetland crossing would occur at wetland D3, another forested red maple swamp. Again, crossing of this wetland would occur at its narrowest point. Total wetland impacts are estimated at 4,500 sf, assuming roadway fill and 2:1 side slopes. Impacts could be lessened by use of bridges to span these two wetland areas.

The loop road spur and EHGEMS access road would also traverse an area of contaminated soil/groundwater. A Phase 1 investigation has revealed that this area contains soil and/or groundwater that may warrant further investigation and/or remediation. See Section 3.1.6 for more information.

2.3.3 Alternative 2 – Access from Brewer Street

Alternative 2 provides access to the EHGEMS from Brewer Street, along a path coincident with the existing paved driveway that enters the property from Brewer Street (Figure 2.3.3-1). This alternative does not provide a connection to the loop road. Currently, there is an overhead electrical utility line that crosses the existing driveway just north of Brewer Street that continues in a general northerly direction toward the Stadium. The utility line, maintained by CL&P, runs parallel to the existing driveway on its western edge. An underground gas line is located along this corridor as well.

Alternative 2 was designed by aligning the western edge of the proposed EHGEMS access road right-of-way with the western edge of the existing driveway to avoid the need for extensive relocation of utilities under this alternative. However, this alignment results in wetland and floodplain impacts (Figure 2.3.3-1) that could be reduced if the road were shifted to the west. Shifting the road to the west would require the relocation of the electric and gas utilities at a minimum additional cost of $100,000.

The wetlands that would be impacted under this alternative are E2, 3, 4, and 5. These are isolated wetlands at the toes of slope of the existing driveway. The wetlands west of the driveway are likely remnant borrow pits, possibly created for the construction of the driveway. The wetlands west of the driveway are forested. These wetlands were investigated in March and June, 2005 to determine if they qualify as vernal pools. At the time of the investigations, these wetlands did not contain evidence of obligate vernal pool species. Further investigation of wetlands E3 and E4 may be warranted to confirm this result. Wetlands E1 and E2 have a short hydro-period and would not support obligate vernal pool species.

As the road runs north, it would cross wetland C2, a forested red maple swamp. It would continue north to the EHGEMS driveway, which would traverse a narrow portion of wetland D3. Total wetland impact for this alternative is estimated at 24,600 sf. Impacts could be lessened by use of bridges to span the wetland areas.

This alternative, and any alternative that uses the existing driveway off Brewer Street (Alternatives 3 and 4) would also result in impacts to the 100- and 500-year floodplain of Pewterpot Brook. Alternative 2 would impact approximately 30,400 sf of floodplain. Under Section 25-68 of the Connecticut General Statutes (CGS), DECD would be required to certify that the project would not negatively impact upstream or downstream properties. A full hydraulic analysis of Pewterpot Brook would be conducted during the design phase of the project to

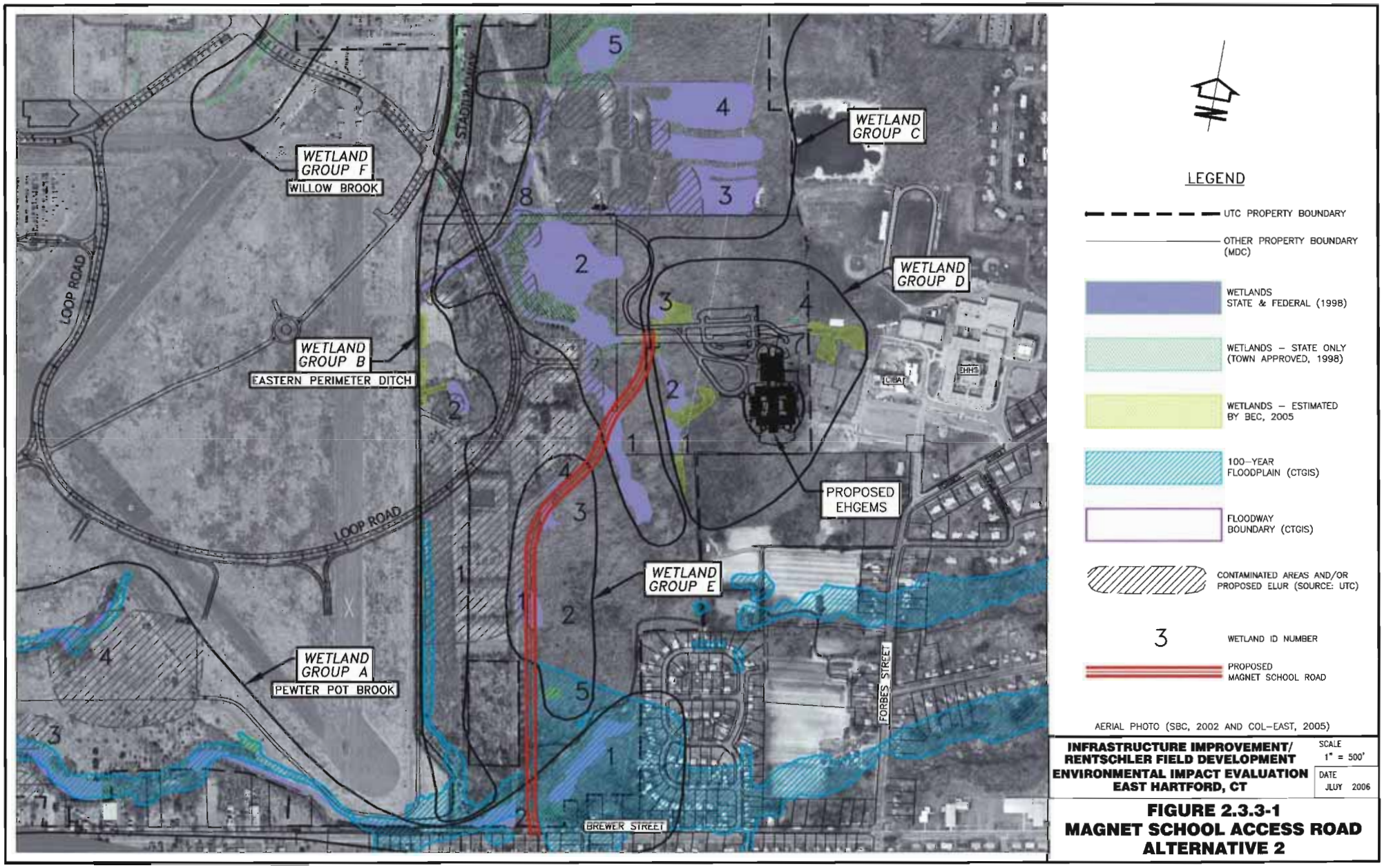


FIGURE 2.3.3-1
MAGNET SCHOOL ACCESS ROAD ALTERNATIVE 2

adequately assess potential floodplain impacts. If the analysis indicates that impacts would occur, then a compensatory flood storage area may need to be constructed to offset the impacts.

This alternative and the others that involve the use of the driveway off Brewer Street (Alternatives 3 and 4) would require an upgrade of the existing driveway crossing of Pewterpot Brook. The existing crossing consists of a 25-30 ft asphalt surface over a corrugated metal pipe that extends approximately 10 ft from each side of the asphalt. The existing crossing would be removed and replaced with a single span bridge so that impacts to Pewterpot Brook and the floodway are minimized or avoided.

The western portion of the proposed EHGEMS access road is along the outer margins of an area that has been identified as having contaminated soil/groundwater. A Phase 1 investigation has revealed that this area contains groundwater contamination that may require further investigation and/or remediation.

Alternatives 2, 3, and 4 (and to a lesser degree Alternatives 1 and 5) would also involve potential impacts to eastern box turtle habitat. The eastern box turtle is a State Species of Special Concern. Its habitat is primarily upland forests surrounding wetlands. Two carapaces of this species were found during field investigations in the spring of 2005. Therefore, it is assumed that eastern box turtle inhabit the uplands adjacent to and between wetland systems D and E.

2.3.4 Alternative 3 – Access from Brewer Street

As shown in Figure 2.3.4-1, Alternative 3 enters the property at the same location as Alternative 2, but it aligns to the east and hugs the eastern property line while minimizing floodplain impacts to the maximum extent possible. This alternative would result in a ROW that crosses an area that is targeted for future residential development by TMG.

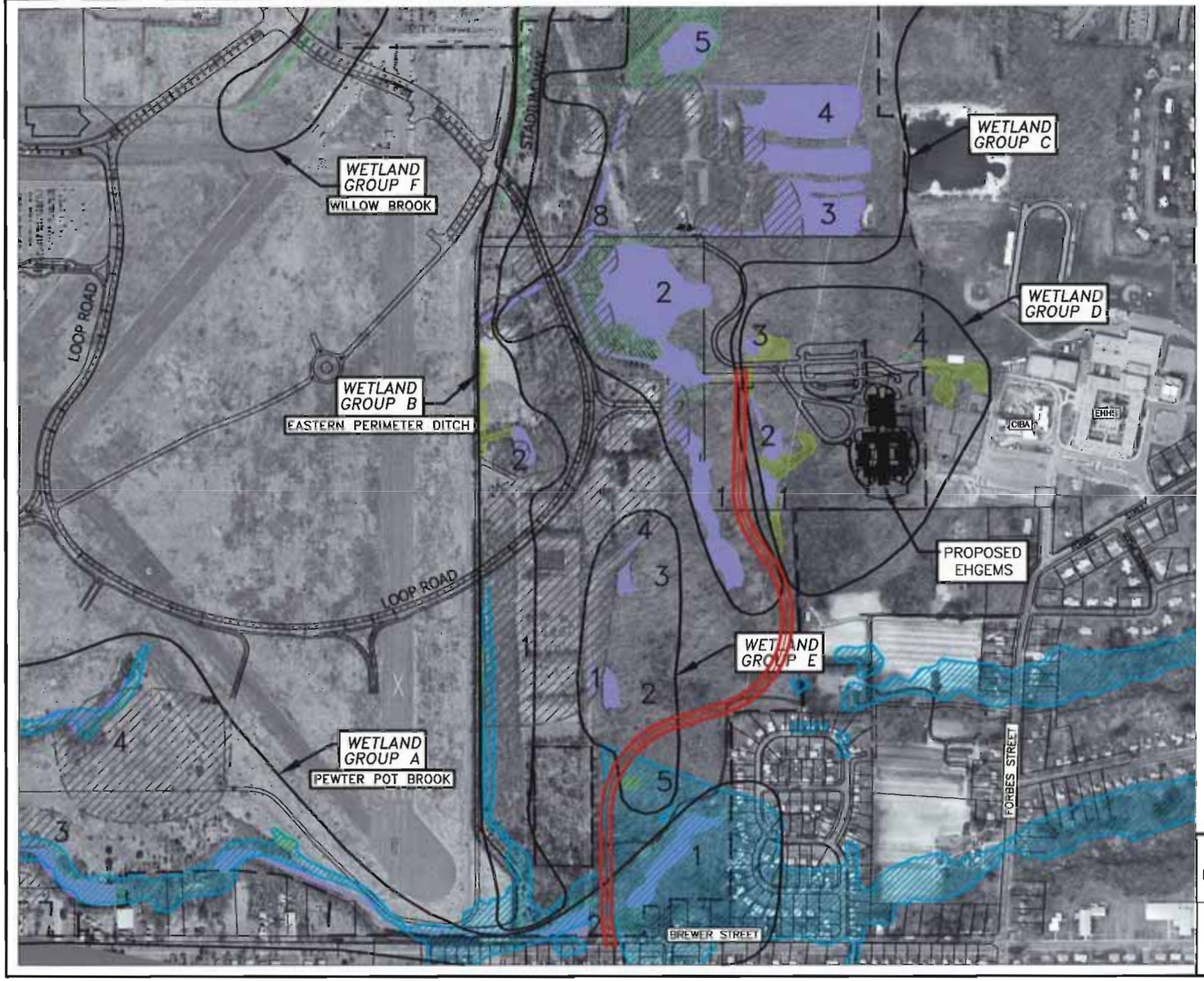
This alternative avoids major wetland impacts, but still has one wetland crossing at the EHGEMS access driveway. Total wetland impacts for this alternative are estimated at 1,200 sf. Total floodplain impacts are estimated at 35,800 sf. This is the longest access road alternative at approximately 3,490 ft. This alternative avoids areas of soil/groundwater contamination.

2.3.5 Alternative 4 – Access from Brewer Street

Alternative 4 proposes an access roadway that connects Brewer Street to the loop road spur west of the proposed EHGEMS site. The alternative includes the extension of the loop road to the magnet school, as shown in Figure 2.3.5-1. The extension would require one wetland crossing, which would be configured to cross at the narrowest portion of wetland C2.

The roadway connecting Brewer Street to the loop road impacts both floodplain and wetlands and has one stream crossing, Pewterpot Brook. It would cross utilities in two locations and would also run parallel to the utilities in other areas, potentially requiring the relocation of utility poles. As in Alternative 2, shifting the roadway to the west would reduce wetland impacts but would result in the need to relocate more of utilities at an increased cost. This roadway would connect to the loop road spur at a "T"-intersection.

Wetland impacts for this alternative are similar to those of Alternative 2 in that wetlands E2, 3, 4, and 5 would be impacted. However, this alternative avoids the relatively large D3 wetland crossing of Alternative 2 by connecting directly with the loop road spur. Total wetland impacts for Alternative 4 are estimated at 21,000 sf. Impacts could be lessened by use of bridges to span these two wetland areas.



LEGEND

- UTC PROPERTY BOUNDARY
- OTHER PROPERTY BOUNDARY (MDC)
- WETLANDS STATE & FEDERAL (1998)
- WETLANDS – STATE ONLY (TOWN APPROVED, 1998)
- WETLANDS – ESTIMATED BY BEC, 2005
- 100–YEAR FLOODPLAIN (CTGIS)
- FLOODWAY BOUNDARY (CTGIS)
- CONTAMINATED AREAS AND/OR PROPOSED ELUR (SOURCE: UTC)
- 3 WETLAND ID NUMBER
- PROPOSED MAGNET SCHOOL ROAD

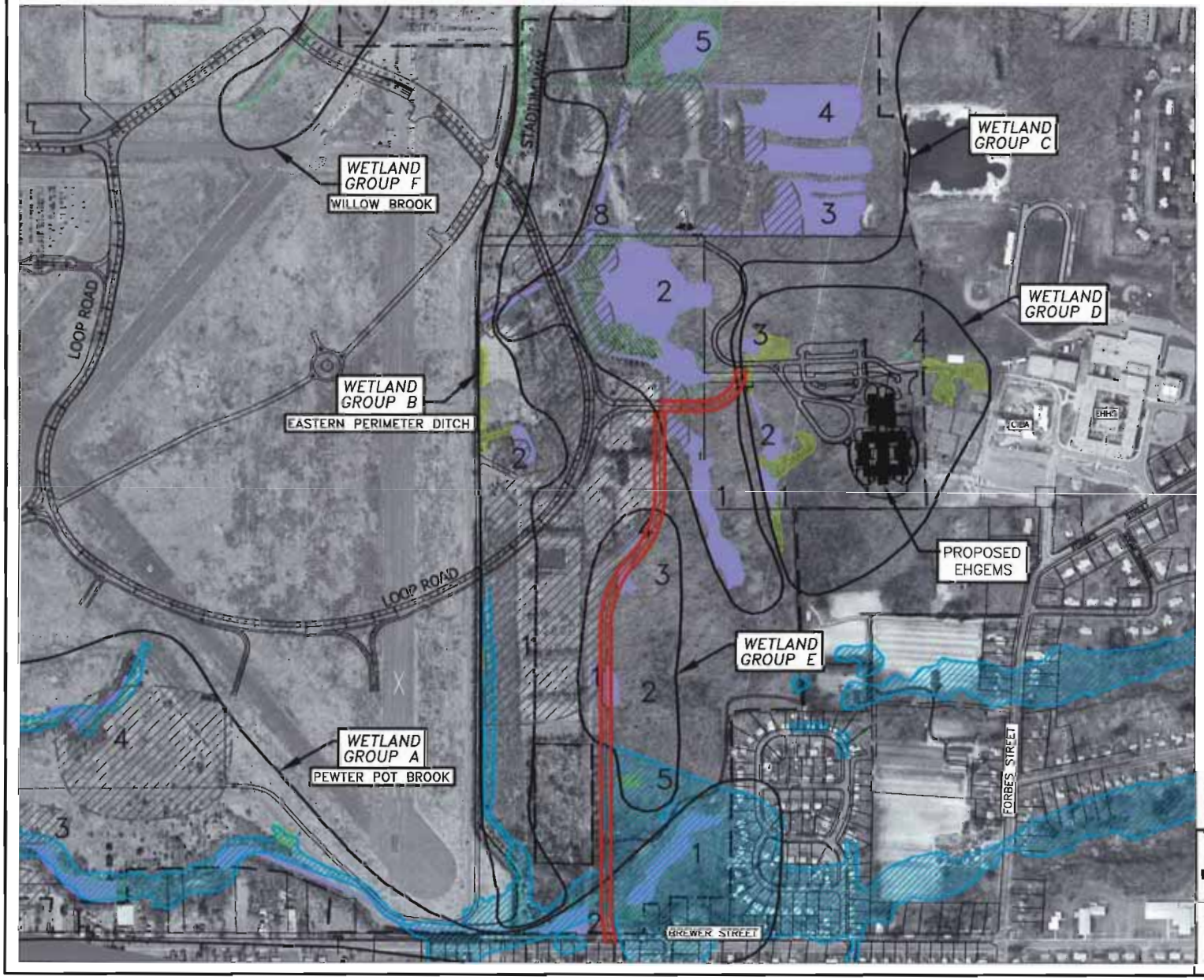
AERIAL PHOTO (SBC, 2002 AND COL–EAST, 2005)

INFRASTRUCTURE IMPROVEMENT/ RENTSCHLER FIELD DEVELOPMENT ENVIRONMENTAL IMPACT EVALUATION EAST HARTFORD, CT

SCALE 1" = 500'

DATE JULY 2006

FIGURE 2.3.4-1
MAGNET SCHOOL ACCESS ROAD ALTERNATIVE 3



LEGEND

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- OTHER PROPERTY BOUNDARY (MDC)
- WETLANDS STATE & FEDERAL (1998)
- WETLANDS – STATE ONLY (TOWN APPROVED, 1998)
- WETLANDS – ESTIMATED BY BEC, 2005
- 100-YEAR FLOODPLAIN (CTGIS)
- FLOODWAY BOUNDARY (CTGIS)
- CONTAMINATED AREAS AND/OR PROPOSED ELUR (SOURCE: UTC)
- 3 WETLAND ID NUMBER
- PROPOSED MAGNET SCHOOL ROAD

AERIAL PHOTO (SBC, 2002 AND COL-EAST, 2005)

INFRASTRUCTURE IMPROVEMENT/ RENTSCHLER FIELD DEVELOPMENT ENVIRONMENTAL IMPACT EVALUATION EAST HARTFORD, CT

SCALE 1" = 500'

DATE JULY 2006

FIGURE 2.3.5-1
MAGNET SCHOOL ACCESS ROAD ALTERNATIVE 4

Floodplain impacts are estimated at 30,400 sf. Of the four alternatives, this one would traverse the largest area of soil/groundwater contamination (85,500 sf). This alternative may also require the removal of existing building foundations located immediately south of the loop road spur.

2.3.6 Access from Forbes Street

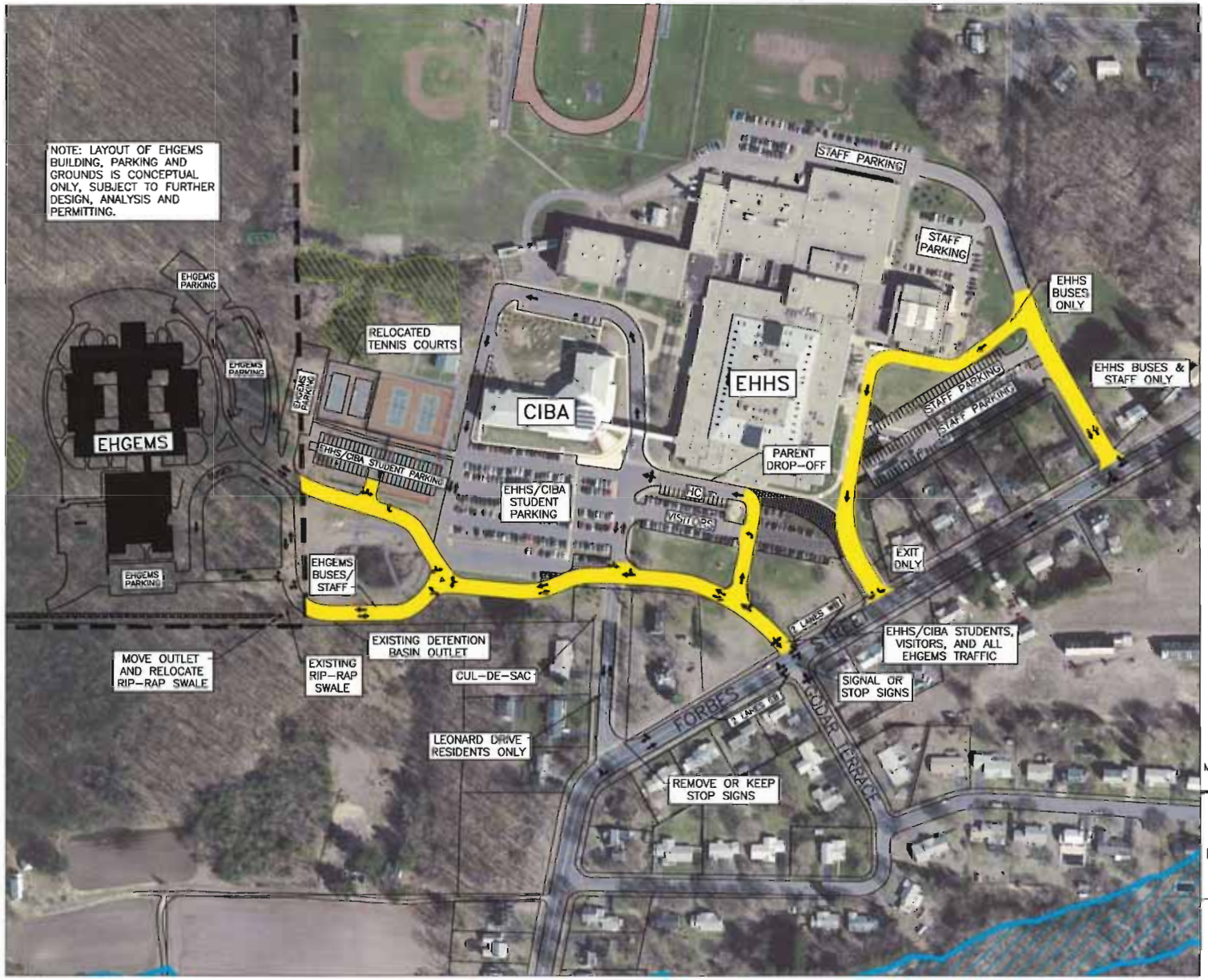
Alternative 5 would entail access to the EHGEMS from Forbes Street through the internal parking and circulation areas of the CIBA and EHHS. Six alternatives from Forbes Street were developed and evaluated and the preferred concept plan is shown in Figure 2.3.6-1. This plan was developed through coordination with Town engineering staff, the Town Board of Education, and CREC and its architects. A Public Information Meeting was held at CIBA on June 14 to solicit input from local residents on the project. A Public Hearing was also conducted at Town Hall on July 6 before the Town Council. Comments received at these two events have been reviewed and summarized and many of the suggestions will be included in the design phase of the project.

Currently, there are two access drives for the EHHS and one (Leonard Dr.) for the CIBA. Leonard Drive is a short street segment that also serves as access to tennis courts and to the ball fields behind the CIBA and EHHS. The two driveways to EHHS have stop control at the driveway exits only with no stop control on Forbes Street. Discussions with Town staff have indicated that the school-generated traffic from the CIBA and the neighboring EHHS creates congestion and potentially unsafe conditions along this stretch of Forbes Street. Any additional traffic added to this area, particularly large vehicles such as buses, could exacerbate this condition. Furthermore, if Leonard Drive was proposed as the access for the EHGEMS, the existing CIBA parking lot would be impacted and have to be reconfigured to recover lost spaces from the access road extension to the EHGEMS site. For these reasons, the reconfiguration of the existing access and circulation patterns of the CIBA, EHHS and the proposed magnet school was investigated with the goal of improving existing parking and internal circulation within the EHHS/IBA campus as well as improved traffic flow and safety along this segment of Forbes Street.

Alternative 5 proposes the construction of a new shared driveway to service EHHS, the CIBA, and the proposed magnet school. This driveway would be located directly across from Godar Terrace, thereby creating a four-way intersection. The EHHS eastern driveway would remain and the Leonard Dr. access to the CIBA would be abandoned, leaving Leonard Drive as a cul-de-sac. Parking areas and internal access driveways would be reconfigured as shown in Figure 2.3.6-1.

A traffic analysis was conducted for the preferred alternative to determine the traffic impacts in the project area. Turning movement counts were conducted in the morning and afternoon school peak hours at the intersection of Forbes Street with the North Access Drive, Godar Terrace and Leonard Drive. In addition, average daily traffic counts were conducted along Forbes Street in the vicinity of the campus. The anticipated traffic volumes to be generated from the magnet school were added to the background traffic volumes, which were escalated for the future year, 2009 using a 2% annual growth factor.

A conservative estimate of traffic during the peak hours was made, assuming that all EHHS, CIBA and EHGEMS generated traffic would arrive or depart within the same peak hour. This is not the case as EHGEMS school hours are offset from the EHHS/CIBA hours by over an hour. Therefore, in reality, the peak hours for the facilities would not coincide. Furthermore, it was assumed that the existing EHGEMS, located at O'Connel on May Road just south of the new EHGEMS site, would not be vacated when the new magnet school is constructed. Also, it was assumed that the pedestrian phase at Forbes Street and Godar Terrace would be activated every signal cycle. This too is unlikely.



LEGEND

- UTC PROPERTY BOUNDARY
- OTHER PROPERTY BOUNDARY (MDC)
- WETLANDS STATE & FEDERAL (1998)
- WETLANDS – STATE ONLY (TOWN APPROVED, 1998)
- WETLANDS – ESTIMATED BY BEC, 2005
- 100-YEAR FLOODPLAIN (CTGIS)
- FLOODWAY BOUNDARY (CTGIS)
- CONVERT TO LAWN
- BRICK PAVERS

MAGNET SCHOOL LAYOUT COURTESY OF JCJ ARCHITECTURE, HARTFORD, CT.
AERIAL PHOTO (SBC, 2005)

INFRASTRUCTURE IMPROVEMENT/ RENTSCHLER FIELD DEVELOPMENT ENVIRONMENTAL IMPACT EVALUATION EAST HARTFORD, CT

BEC

SCALE 1" = 200'

DATE AUGUST 2006

FIGURE 2.3.6-1

ALTERNATIVE 5 PREFERRED ACCESS PLAN

With the conservative assumptions in place, traffic volumes were input into the Synchro® model to calculate the levels of service (LOS) at each of the affected intersections. Letter designations from A to F are used to represent the LOS for the traffic operation at each intersection or roadway, with LOS A representing the best operating conditions and LOS F the worst. An LOS rating of D or better is generally acceptable in urban environments.

The LOS is determined differently for signalized intersections, unsignalized intersections with multi-way STOP, and unsignalized intersections with STOP control on the minor street approaches. For signalized intersections and unsignalized intersections with multi-way STOP control, the analysis considers the operation of all traffic entering the intersection and the LOS is determined for the overall conditions at the intersection. For unsignalized intersections with STOP control on the minor street, the analysis assumes that through and right-turning traffic on the major street is not affected by traffic on the side streets. Hence, the LOS is determined for the movements on the side street and the left-turn movement from the major street onto the side street. Levels of Service are defined by the average delay per vehicle as indicated below.

Signalized Intersections

Level of Service	Avg. Delay/Vehicle (in Seconds)
LOS A	< 10.0
LOS B	> 10.0 and < 20.0
LOS C	> 20.0 and < 35.0
LOS D	> 35.0 and < 55.0
LOS E	> 55.0 and < 80.0
LOS F	> 80.0

Unsignalized Intersections

Level of Service	Avg. Delay/Vehicle (in Seconds)
LOS A	< 10.0
LOS B	> 10.0 and < 15.0
LOS C	> 15.0 and < 25.0
LOS D	> 25.0 and < 35.0
LOS E	> 35.0 and < 50.0
LOS F	> 50.0

The traffic analysis demonstrates that all intersections would operate at acceptable levels of service during the AM and PM peak hours as shown in Tables 2.3.6-1 and 2.3.6-2. The Forbes Street/Godar Terrace intersection would operate at LOS C during the PM peak hour using the conservative assumptions stated above. It should be noted that if the pedestrian phase signal was not activated, or was activated infrequently, LOS would actually be at B or A.

Table 2.3.6-1. AM Peak Hour Levels of Service for Proposed EHGEMS Site Access

Intersection	Existing 2006	2009 No-Build	Future Build With Improvements 2009
Forbes St. at Leonard Dr.	B	B	A
Forbes St. at Godar Terrace	A	A	B
Forbes St. at H.S. South Drive	A	A	A
Forbes St. at H.S. North Drive	C	C	C

[1] Signalized Intersection - all others unsignalized. Signal is likely warranted because new access drive to the schools would separately operate at Level of Service F if unsignalized. Analysis assumes pedestrian phase for every cycle.

Table 2.3.6-2. PM Peak Hour Levels of Service for Proposed EHGEMS Site Access

Intersection	Existing 2006	2009 No-Build	Future Build With Improvements 2009
Forbes St. at Leonard Dr.	B	B	B
Forbes St. at Godar Terrace	A	A	C
Forbes St. at H.S. South Drive	A	A	A
Forbes St. at H.S. North Drive	B	C	B

[1] Signalized Intersection - all others unsignalized. Signal is likely warranted because new access drive to the schools would separately operate at Level of Service F if unsignalized. Analysis assumes pedestrian phase for every cycle.

At the request of the Town Council, an incremental analysis was conducted to determine traffic flow conditions at the above intersections during 30-minute segments over a 2-hour peak period. The results are shown in Tables 2.3.6-3 and 2.3.6-4.

As shown in Table 2.3.6-3, the traffic generation period from EHHS and CIBA would not coincide with the traffic generation period of EHGEMS because of staggered school hours. Morning traffic to and from EHHS and CIBA peaks from 7:00 - 7:30 as the school day begins at 7:20. EHGEMS traffic would begin arriving in the 8:00 - 8:30 period when EHHS/CIBA generated traffic is low. Similar patterns would exist in the afternoon.

The corresponding levels of service for the 30-minute periods during the morning and afternoon 2-hour peak periods would result in good traffic flow conditions at all intersections as noted in Table 2.3.6-4.

Table 2.3.6-3. Projected Levels of Service for 30-Minute Increments of the AM and PM Peak Periods at the EHHS/CIBA/EHGEMS Campus

Time Period	EHHS/CIBA	EHGEMS	TOTAL
7:00-7:30	769		769
7:30-8:00	193		193
8:00 - 8:30	54	88	142
8:30-9:00	33		33
2:00 - 2:30	433		433
2:30-3:00	243		243
3:00 - 3:30	202	120	322

Table 2.3.6-4. Projected Traffic Generation for EHHS/CIBA/EHGEMS Campus During AM and PM Peak Periods

	Forbes Street @			
Time Period	Leonard	Godar	S. Access Dr.	N. Access Dr.
7:00-7:30	B	C	A	A
7:30-8:00	A	B	A	A
8:00 - 8:30	A	C	A	A
8:30-9:00	A	B	A	A
2:00 - 2:30	B	C	A	A
2:30-3:00	A	C	A	A
3:00 - 3:30	A	C	A	A

2.3.7 Comparison of Alternatives

The five EHGEMS access road alternatives were evaluated with respect to the criteria listed in Table 2.3.7-1. Below is a comparison of each alternative relative to these criteria and a presentation of the rationale for selection of the preferred alternative.

Access to all of each of the sites, with the exception of Alternatives 1 and 5 would be from the existing driveway off Brewer Street. Alternative 1 access would entail the planned East Hartford Boulevard North intersection with the internal loop road. Alternative 5 would entail access from Forbes Street at the EHHS and the CIBA driveways. Alternatives 2, 3, and 4 would require replacement of the existing crossing of Pewterpot Brook.

The length of the access road to the new EHGEMS is the least under Alternative 5. The length of road required to access the EHGEMS under Alternatives 1, 2, 3, and 4 are similar and range from 3,155 ft to 3,490 ft. Implementation of Alternative 5, although involving the shortest access road, would require the reconfiguration of the existing EHHS and BIA driveway and parking areas.

The existing traffic conditions along Brewer Street are adequate to support the additional traffic generated by the EHGEMS under Alternatives 2-4 as evidenced by existing and projected (2008) LOS of B in the AM and PM peak hours at the nearby Brewer Street/Forbes Street intersection. It is anticipated that 145 vehicles would be generated from the EHGEMS during the morning peak

hour. The addition of school-generated traffic would not significantly impact the capacity of the roadway. Stop control would be warranted for the southbound approach to the intersection, i.e. for the vehicles exiting the site. As this is a magnet school, it will draw students from all over East Hartford and Glastonbury. Therefore, there will likely be relatively few students from the immediate neighborhood and a corresponding minimal amount of pedestrian traffic.

Under Alternative 1, access to the site would be via Silver Lane or Roberts Street to the planned East Hartford Boulevard North and the planned loop road corridor. As mentioned previously, the portion of the loop road east of East Hartford Boulevard North is not proposed for construction until later phases of the development project. A small portion of the loop road will be constructed in Phase 1 to access Cabelas. The remainder of the eastern portion of the loop road will be constructed in later phases; therefore, the entire loop road would not be in place in time for the planned opening of the EHGEMS (summer 2008). However, in the interim, the segment of the loop road from the East Hartford Boulevard North east to the loop road spur could be constructed as a two-lane access road to serve the EHGEMS in time for its opening. At a future date, when the loop road is completed, the EHGEMS access road would be integrated into the internal loop road system, which would provide one-way circulation through the proposed Rentschler Field development.

Wetland impacts would occur for each alternative with the exception of Alternative 5. Wetland impacts are greatest for Alternatives 2 and 4 as these would impact the existing isolated wetlands along the existing driveway off Brewer Street. Alternative 3 minimizes these impacts by avoiding some of these wetlands and Alternative 1 impacts involve 2 wetland crossings amounting to approximately 4,500 sf of direct impact.

Floodplain impacts would be greatest under Alternative 4 (85,500 sf), while Alternatives 1 and 5 avoid floodplain impacts altogether.

Furthermore, the ACOE and DEP have identified the southeastern portion of the Rentschler Field site, from Pewterpot Brook north to the Football Stadium as a valuable wildlife corridor due to the presence of wetlands and relatively undisturbed upland forest. The eastern box turtle, a State Species of Special Concern, is also believed to inhabit this area. These agencies and TMG have been negotiating a potential conservation easement for this area (Figure 3.2.3-2). This would make Alternatives 1-4 infeasible as these proposed routes would traverse the heart of the easement areas.

Alternatives 3 and 5 avoid contact with contaminated soil and/or groundwater. Alternatives 1, 2, and 4 would traverse areas of known soil/groundwater contamination. Additional investigation and remediation (potentially) would be required prior to construction.

Alternatives 1-4 would require the creation of a ROW for the road and utilities as the road would traverse UTC-owned land. Alternative 5 would traverse existing Town of East Hartford property; therefore, no ROW acquisition would be required.

Also, Alternatives 1-4 would have varying degrees of impact on the future development of the eastern portion of the UTC-property. The impact of this ROW on the potential development cannot be specifically addressed at this time because there is insufficient detail on the proposed land uses, and extents thereof, for this area. Alternative 5 would have no impact on the proposed development of Rentschler Field.

None of the access alternatives would impact historic properties. A Phase 1a archaeological survey of the project area was conducted and it was determined that there is potential for archaeological remains at the proposed EHGEMS site and along the access road from Brewer Street and the Rentschler Field internal loop road proposed as Alternatives 1-4.

Table 2.3.7-1. Summary of East Hartford-Glastonbury Elementary Magnet School Access Alternatives and Impacts.

Parameter	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Access from	Silver Ln.	Brewer St.	Brewer St.	Brewer St.	Forbes St.
Length of road (ft)	3,425[1]	3,155	3,490	3,347[1]	1,400
Total impervious surface (sf)	171,250	157,750	174,500	167,349	50,000
Number of stream crossings	0	1	1	1	0
Number of wetland crossings (inc. streams)	2	4	1	4	0
Direct wetland impact[2,3,4] (Federal) (sf)	4,500	24,600	1,200	21,000	0
Direct 100-yr. floodplain impact[3] (sf)	0	30,400	35,800	30,400	0
Area of contaminated soil/groundwater impacted (sf)	10,100	41,600	0	85,500	0
Impact to historical properties (Y/N)	N	N	N	N	N
Impact to potential sensitive archaeological areas (Y/N)[5]	Y	Y	Y	Y	N
Direct property impacts (other than UTC) (Y/N)	N	N	N	N	Y
Utility right-of-way impacts (Y/N)	Y	Y	Y	Y	N
Electrical transmission line impacts (Y/N)	Y	Y	Y	Y	N

[1] As measured from the intersection of the ring road with the EH BLVD North.
[2] Wetland impacts may be reduced by the application of bridges and/or culverts in appropriate locations.
[3] Assuming 2:1 side slopes and 2 ft. elevation difference between top of road and existing grade.
[4] Assuming total span of existing Pewterpot Brook results in zero net impact to wetland resources.
[5] Additional archaeological survey may be needed to better determine if archaeological remains are significant

2.4 STADIUM PARKING

Alternative Stadium parking arrangements have been discussed between OPM, Madison Square Garden (MSG, the operators of the Stadium), UTC, and TMG in order to develop a mutually acceptable plan that accommodates Stadium parking and the future development of Rentschler Field. The Plan for parking also considered future access with the proposed full build roadway improvements in place.

Off-site parking was considered, however this alternative, on a large-scale, was deemed infeasible because there are an insufficient number of large lots available for Friday evening and Saturday events. Most large lots in the area are associated with commercial businesses whose peak usage coincides with Stadium event times, evenings and Saturdays. Nevertheless, there will continue to be private businesses along Silver Lane that offer event parking.